

NOTE TO PTO PERSONNEL:
THIS PATENT APPLICATION IS BEING
FILED WITH SMALL ENTITY STATUS

DUSTING BRUSH

CROSS-REFERENCES TO RELATED APPLICATIONS

3 The present invention is a continuation-in-part application of the
4 co-pending U.S. serial No. 10/193,301, filed on July 12, 2002.

BACKGROUND OF THE INVENTION

6 1. Field of the Invention

7 The present invention relates to a dusting brush, and more
8 particularly to a dusting brush that can be operated easily and conveniently.

2. Description of the Related Art

10 A conventional dusting brush in accordance with the prior art shown
11 in Fig. 8 comprises a handle 7, and a plurality of bristles 6 mounted on the top
12 of the handle 7. Thus, the conventional dusting brush can be used to clean and
13 remove the dust, dirt or the like. However, the bristles 6 protrude outward from
14 the handle 7 when not in use, thereby decreasing the aesthetic quality of the
15 conventional dusting brush.

16 The closest prior art of which the applicant is aware is disclosed in
17 his U.S. Patent No. 6,226,828-B1, filed on December 30, 1999, entitled
18 "BRUSH FOR REMOVING DUST".

SUMMARY OF THE INVENTION

20 The present invention is to mitigate and/or obviate the disadvantage
21 of the conventional dusting brush.

1 The primary objective of the present invention is to provide a dusting
2 brush that can be operated easily and conveniently, thereby facilitating the user
3 operating the dusting brush.

4 Another objective of the present invention is to provide a dusting
5 brush, wherein the bristles are fully hidden in the sliding sleeve when not in
6 use, thereby enhancing the aesthetic quality of the dusting brush.

7 A further objective of the present invention is to provide a dusting
8 brush, wherein the seat portion of the brush holder has a bottom formed with a
9 flat face that can be placed on a horizontal face, such as the table, so that the
10 dusting brush is disposed at an upright state without occupying the space.

11 In accordance with the present invention, there is provided a dusting
12 brush, comprising a brush holder, a sliding sleeve slidably mounted on the
13 brush holder, two symmetrical ornament shells mounted on the sliding sleeve
14 to move therewith, and a plurality of bristles mounted on the brush holder,
15 wherein:

16 the brush holder has a first end having an outer wall formed with two
17 radially opposite locking bosses and a second end formed with an enlarged seat
18 portion;

19 the sliding sleeve has an inner wall formed with two radially opposite
20 slideways for slidably mounting the two locking bosses of the brush holder,
21 each of the two slideways of the sliding sleeve has a bottom formed with a

1 locking cavity for snapping and positioning a respective one of the two locking
2 bosses of the brush holder;
3 the two ornament shells are combined with each other to surround
4 the outer wall of the sliding sleeve; and
5 the bristles are protruded outward from the first end of the brush
6 holder.

7 Further benefits and advantages of the present invention will become
8 apparent after a careful reading of the detailed description with appropriate
9 reference to the accompanying drawings.

10 BRIEF DESCRIPTION OF THE DRAWINGS

11 Fig. 1 is a perspective view of a dusting brush in accordance with the
12 preferred embodiment of the present invention;

13 Fig. 2 is an exploded perspective view of the dusting brush 3 as
14 shown in Fig. 1;

15 Fig. 3 is a plan cross-sectional view of the dusting brush as shown in
16 Fig. 1;

17 Fig. 4 is a schematic operational view of the dusting brush as shown
18 in Fig. 1 in use;

19 Fig. 5 is a schematic operational view of the dusting brush as shown
20 in Fig. 3 in use;

21 Fig. 6 is a plan cross-sectional view of a dusting brush in accordance
22 with another embodiment of the present invention;

1 Fig. 7 is a plan cross-sectional view of a dusting brush in accordance
2 with another embodiment of the present invention; and

3 Fig. 8 is a perspective view of a conventional dusting brush in
4 accordance with the prior art.

5 **DETAILED DESCRIPTION OF THE INVENTION**

6 Referring to the drawings and initially to Figs. 1-3, a dusting brush in
7 accordance with the preferred embodiment of the present invention comprises
8 a brush holder 2, a sliding sleeve 3 slidably mounted on the brush holder 2, two
9 symmetrical ornament shells 4 and 4' mounted on the sliding sleeve 3 to move
10 therewith, and a plurality of bristles 21 mounted on the brush holder 2.

11 The brush holder 2 has a first end having an outer wall formed with
12 two radially opposite wedge-shaped locking bosses 23 and a second end
13 formed with an enlarged seat portion 22. The seat portion 22 of the brush
14 holder 2 is formed with a tapered urging face 220. In addition, the seat portion
15 22 of the brush holder 2 has a bottom formed with a flat face 222.

16 The sliding sleeve 3 has an inner wall formed with two radially
17 opposite slideways 31 for slidably mounting the two locking bosses 23 of the
18 brush holder 2. Each of the two slideways 31 of the sliding sleeve 3 has a
19 bottom formed with a wedge-shaped locking cavity 311 for snapping and
20 positioning a respective one of the two locking bosses 23 of the brush holder 2.

21 The two ornament shells 4 and 4' are combined with each other to
22 surround the outer wall of the sliding sleeve 3. The ornament shell 4' is formed

1 with two insertion holes 41' and the ornament shell 4 is formed with two
2 insertion pins 41 each inserted into a respective one of the two insertion holes
3 41' of the ornament shell 4', so that the two ornament shells 4 and 4' are
4 combined with each other.

5 The bristles 21 are protruded outward from the first end of the brush
6 holder 2.

7 In operation, referring to Figs. 1-5, the sliding sleeve 3 is slidable on
8 the brush holder 2 to the position as shown in Figs. 1 and 3, where each of the
9 two locking bosses 23 of the brush holder 2 is snapped into and locked in the
10 locking cavity 311 of a respective one of the two slideways 31 of the sliding
11 sleeve 3, and the lower end of the sliding sleeve 3 is fixed on the first end of the
12 brush holder 2, so that the bristles 21 are retracted into the sliding sleeve 3.
13 Thus, the bristles 21 are fully hidden in the sliding sleeve 3 when not in use,
14 thereby enhancing the aesthetic quality of the dusting brush.

15 Alternatively, the sliding sleeve 3 is slidable on the brush holder 2 to
16 the position as shown in Figs. 4 and 5, where each of the two locking bosses 23
17 of the brush holder 2 is detached from the respective locking cavity 311 of the
18 sliding sleeve 3 and rested on the upper end of the sliding sleeve 3, and the
19 lower end of the sliding sleeve 3 is urged on the urging face 220 of the seat
20 portion 22 of the brush holder 2, so that the bristles 21 are protruded outward
21 from the sliding sleeve 3 for use.

1 Accordingly, the dusting brush can be operated easily and
2 conveniently, thereby facilitating the user operating the dusting brush. In
3 addition, the bristles 21 are fully hidden in the sliding sleeve 3 when not in use,
4 thereby enhancing the aesthetic quality of the dusting brush. Further, when the
5 bristles 21 are protruded outward from the sliding sleeve 3 for use, each of the
6 two locking bosses 23 of the brush holder 2 is rested on the upper end of the
7 sliding sleeve 3, and the lower end of the sliding sleeve 3 is urged on the urging
8 face 220 of the seat portion 22 of the brush holder 2, so that the sliding sleeve 3
9 is combined with the brush holder 2 rigidly and stably, thereby facilitating the
10 user operating the dusting brush. Further, the seat portion 22 of the brush
11 holder 2 has a bottom formed with a flat face 222 that can be placed on a
12 horizontal face, such as the table, so that the dusting brush is disposed at an
13 upright state without occupying the space. Further, the two ornament shells 4
14 and 4' are combined with each other to surround the outer wall of the sliding
15 sleeve 3, thereby enhancing the aesthetic quality of the dusting brush.

16 Referring to Fig. 6, the dusting brush in accordance with another
17 embodiment of the present invention further comprises an incoming call
18 display 5 mounted in the ornament shell 4.

19 Referring to Fig. 7, the dusting brush in accordance with another
20 embodiment of the present invention further comprises an incoming call
21 display 5' mounted in the seat portion 22 of the brush holder 2.

1 Although the invention has been explained in relation to its preferred
2 embodiment(s) as mentioned above, it is to be understood that many other
3 possible modifications and variations can be made without departing from the
4 scope of the present invention. It is, therefore, contemplated that the appended
5 claim or claims will cover such modifications and variations that fall within the
6 true scope of the invention.